



**COMMISSION
SIXTEENTH REGULAR SESSION**
Port Moresby, Papua New Guinea
5 - 11 December 2019

**REFERENCE DOCUMENT FOR THE REVIEW OF CMM 2005-03
(NORTH PACIFIC ALBACORE)**

**WCPFC16-2019-23
15 November 2019**

Paper prepared by the Secretariat

A. INTRODUCTION

1. The purpose of this paper is to provide a quick reference guide to the recommendations of the Scientific Committee (SC), the Northern Committee (NC) and the Technical and Compliance Committee (TCC) of relevance to the discussions on stock status, management advice and amendments to the existing CMM for North Pacific albacore (CMM 2005-03). The annexed information from NC15 at Portland meeting, including updated information on North Pacific albacore fishing effort and amendments to the existing CMM 2005-03, were extracted from the DRAFT NC15 Summary Report (<https://www.wcpfc.int/node/43895>), which is expected to be formalized and adopted by NC15 at its Special Session on 4 December 2019.

B. SCIENTIFIC COMMITTEE RECOMMENDATIONS

2. The following stock status and management advice are from Paragraphs 49 – 51 of the SC15 Outcomes Document. Refer to **Attachment 1** for the details of most recent stock assessment.

a. Stock status and trends

3. SC15 noted that no stock assessments were conducted for North Pacific albacore in 2019. Therefore, the stock status descriptions from SC13 are still current for North Pacific albacore. For further information on the stock status and trends from SC13, please see <https://www.wcpfc.int/node/29904>. Updated information on catches was not compiled for and reviewed by SC15.

4. SC15 noted that the provisional total NPALB catch by Canada, Japan, USA, Korea, Mexico and Chinese Taipei in 2018 was 49,300 mt, a 9% decrease from 2017 and a 24% decrease from the 2013-2017 average. The detailed catch information by fishery is available in ISC 2019 report (SC15-GN-IP-02). North Pacific albacore is caught by various fishing gears including longline, troll, and pole-and-line.

b. Management Advice and implications

5. SC15 noted that no management advice has been provided since SC13 for North Pacific albacore. Therefore, the advice from SC13 should be maintained, pending a new assessment or other new information. For further information on the management advice and implications from SC13, please see <https://www.wcpfc.int/node/29904>

C. NORTHERN COMMITTEE RECOMMENDATIONS

(Paragraph 14 and 28, DRAFT NC15 Summary Report)

6. NC15 briefly reviewed the levels of fishing effort (number of vessels, vessel days) and catch reported in NC15-WP-01 (**Attachment 2**)

7. NC15 recommends that the Commission adopt the revised CMM replacing CMM 2005-03 (**Attachment 3**).

D. TECHNICAL AND COMPLIANCE COMMITTEE RECOMMENDATIONS

8. TCC15 noted that there are presently nine quantitative limits where there are limited or no additional data presently available to WCPFC to verify the CCM's report on their implementation against the limit. [CMM 2005-03 02 (NP albacore), CMM 2006-04 01 (SW Striped Marlin), CMM 2009-03 01, 02 (Swordfish), CMM 2010-01 05 (NP striped marlin), CMM 2017-01 45, 47, 48 (Tropical tuna vessel limits), CMM 2017-01 51, CMM 2017-08 (Pacific Bluefin)]. TCC15 recommended that the Commission consider whether additional reporting or revised formulations of quantitative limits should be considered so that WCPFC has more ready access to data that can be used to verify a CCM's implementation of a quantitative limit. *(TCC15 draft summary report, para 125)*

9. TCC15 requested that the Northern Committee meeting at WCPFC16 recommend that CMM 2005-03 (North Pacific Albacore) be amended to remove paragraph 3, because it is duplicative with the paragraph 4 report requirement. *(TCC15 draft summary report, para 126)*

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Scientific Committee
Thirteenth Regular Session**

Rarotonga, Cook Islands
9 – 17 August 2019

NORTH PACIFIC ALBACORE STOCK ASSESSMENT
(Paragraphs 340 – 345, SC13 Summary Report)

Provision of scientific information

1. ISC presented working paper SC13-SA-WP-09 *Stock assessment of albacore tuna in the North Pacific Ocean in 2017*.

Stock status and trends

2. SC13 noted that the ISC provided the following conclusions on the stock status of North Pacific albacore.

3. Stock status is depicted in relation to the limit reference point (LRP; $20\%SSB_{\text{current}, F=0}$) for the stock and the equivalent fishing intensity ($F_{20\%}$; calculated as $1-SPR_{20\%}$) (Figure NPALB-1). Fishing intensity (F , calculated as $1-SPR$) is a measure of fishing mortality expressed as the decline in the proportion of the spawning biomass produced by each recruit relative to the unfished state. For example, a fishing intensity of 0.8 will result in a SSB of approximately 20% of SSB_0 over the long run. Fishing intensity is considered a proxy of fishing mortality.

4. The Kobe plot shows that the estimated female SSB has never fallen below the LRP since 1993, albeit with large uncertainty in the terminal year (2015) estimates. Even when alternative hypotheses about key model uncertainties such as natural mortality and growth were evaluated, the point estimate of female SSB in 2015 (SSB_{2015}) did not fall below the LRP, although the risk increases with these more extreme assumptions (Figure NPALB-1). The SSB_{2015} was estimated to be 80,618 mt and was 2.47 times greater than the LRP threshold of 32,614 mt (Table NPALB-1). Current fishing intensity, $F_{2012-2014}$ (calculated as $1-SPR_{2012-2014}$), was lower than potential F-based reference points identified for the north Pacific albacore stock, except $F_{50\%}$ (calculated as $1-SPR_{50\%}$) (Table NPALB-1).

Based on these findings, the following information on the status of the north Pacific albacore stock is provided:

- The stock is likely not overfished relative to the limit reference point adopted by the WCPFC ($20\%SSB_{\text{current}, F=0}$), and
- No F-based reference points have been adopted to evaluate overfishing. Stock status was evaluated against seven potential reference points. Current fishing intensity ($F_{2012-2014}$) is below six of the seven reference points (see ratios in Table NPALB-1), except for $F_{50\%}$.

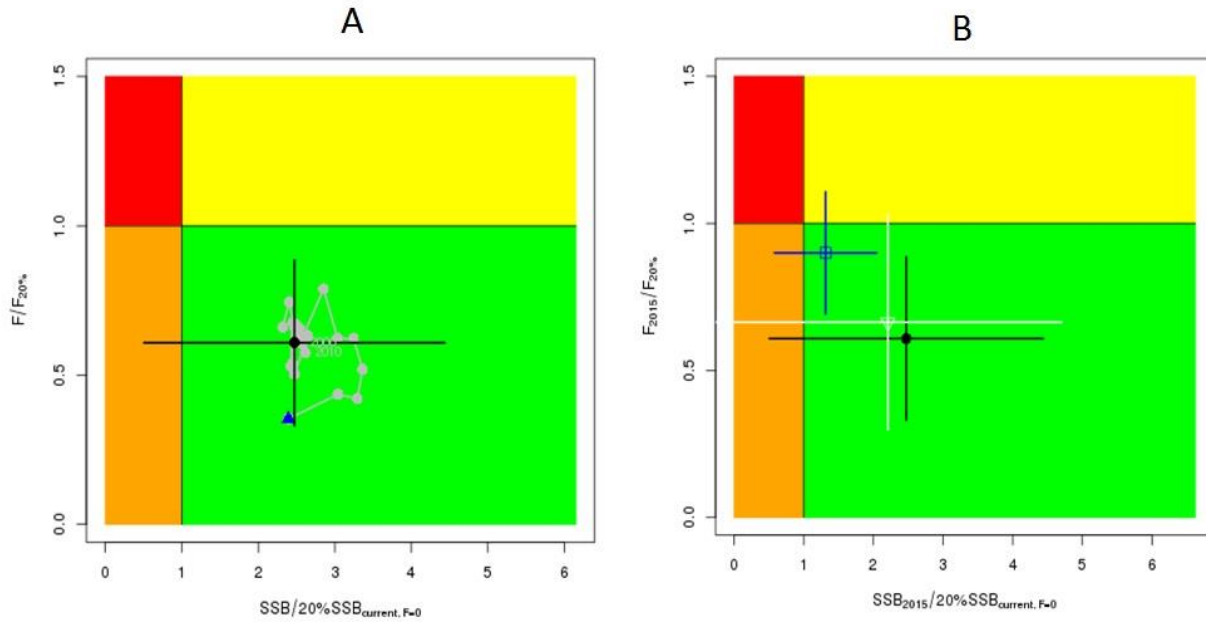


Figure NPALB-1. (A) Kobe plot showing the status of the north Pacific albacore (*Thunnus alalunga*) stock relative to the 20% $SSB_{current, F=0}$ biomass-based limit reference point, and equivalent fishing intensity ($F_{20\%}$; calculated as $1-SPR_{20\%}$) over the base case modelling period (1993-2015). Blue triangle indicates the start year (1993) and black circle with 95% confidence intervals indicates the terminal year (2015). (B) Kobe plot showing stock status and 95% confidence intervals in the terminal year (2015) of the base case model (black; closed circle) and important sensitivity runs with $M = 0.3 \text{ y}^{-1}$ for both sexes (blue; open square), and $CV = 0.06$ for L_{inf} in the growth model (white; open triangle). F_s in this figure are not based on instantaneous fishing mortality. Instead, the F_s are indicators of fishing intensity based on SPR and calculated as $1-SPR$ so that the F_s reflect changes in fishing mortality. SPR is the equilibrium SSB per recruit that would result from the current year's pattern and intensity of fishing mortality.

Table NPALB-1. Estimates of maximum sustainable yield (MSY), female spawning biomass (SSB) quantities, and fishing intensity (F) based reference point ratios for north Pacific albacore tuna for the base case assessment and important sensitivity analyses. SSB_0 and SSB_{MSY} are the unfished biomass of mature female fish and at MSY, respectively. The Fs in this table are not based on instantaneous fishing mortality. Instead, the Fs are indicators of fishing intensity based on SPR and calculated as $1-SPR$ so that the Fs reflect changes in fishing mortality. SPR is the equilibrium SSB per recruit that would result from the current year’s pattern and intensity of fishing mortality. Current fishing intensity is based on the average fishing intensity during 2012-2014 ($F_{2012-2014}$).

Quantity	Base Case	$M = 0.3 \text{ y}^{-1}$	Growth CV = 0.06 for L_{inf}
MSY (t) ^A	132,072	92,027	118,836
SSB_{MSY} (t) ^B	24,770	42,098	22,351
SSB_0 (t) ^B	171,869	270,879	156,336
SSB_{2015} (t) ^B	80,618	68,169	63,719
$SSB_{2015}/20\%SSB_{current, F=0}$ ^B	2.47	1.31	2.15
$F_{2012-2014}$	0.51	0.74	0.57
$F_{2012-2014}/F_{MSY}$	0.61	0.89	0.68
$F_{2012-2014}/F_{0.1}$	0.58	0.90	0.65
$F_{2012-2014}/F_{10\%}$	0.56	0.81	0.63
$F_{2012-2014}/F_{20\%}$	0.63	0.91	0.71
$F_{2012-2014}/F_{30\%}$	0.72	1.04	0.81
$F_{2012-2014}/F_{40\%}$	0.85	1.21	0.96
$F_{2012-2014}/F_{50\%}$	1.01	1.47	1.16

A – MSY includes male and female juvenile and adult fish

B – Spawning stock biomass (SSB) in this assessment refers to mature female biomass only.

Management advice and implications

5. SC13 noted the following conservation information from the ISC.

6. Two harvest scenarios were projected to evaluate impacts on future female SSB: F at the 2012-2014 rate over 10 years ($F_{2012-2014}$) and constant catch¹ (average of 2010-2014 = 82,432 mt) over 10 years. Median female SSB is expected to decline to 63,483 mt (95% CI: 36,046 - 90,921 mt) by 2025, with a 0.2 and <0.01 % probability of being below the LRP by 2020 and 2025, respectively, if fishing intensity remains at the 2012-2014 level² (Figure NPALB-2). In contrast, employing the constant catch harvest scenario is expected to reduce female SSB to 47,591 t (95% CI: 5,223 - 89,958 t) by 2025 and increases the probability that female SSB will be below the LRP to about 3.5 and 30 % in 2020 and 2025, respectively (Figure NPALB-3). In addition, as biomass declines during the projection period the fishing intensity approximately doubles by 2025. The probabilities of declining below the LRP in both harvest scenarios are likely higher in the future because projection results did not capture the full envelope of uncertainty. The ALBWG notes that the lack of sex-specific size data, uncertainty in growth and natural mortality, and the simplified treatment of the spatial structure of North Pacific albacore population dynamics are important sources of uncertainty in the assessment. Based on these findings, the following information is provided:

¹ It should be noted that the constant catch scenario is inconsistent with current management approaches for NPALB adopted by the IATTC and the WCPFC.

² Median future catch for the constant F scenario is expected to be below the average catch level for 2010-2014 (82,432 t – red line in Figure 7-6). This result is likely due to low estimated recruitment in 2011, which is expected to reduce female SSB beginning in 2015, the first year of the projection period.

- If a constant fishing intensity ($F_{2012-2014}$) is applied to the stock, then median female spawning biomass is expected to undergo a moderate decline, with a $< 0.01\%$ probability of falling below the limit reference point established by the WCPFC by 2025. However, expected catches in this scenario will be below the recent average catch level for this stock.
- If a constant average catch ($C_{2010-2014} = 82,432$ mt) is removed from the stock in the future, then the decline in median female spawning biomass will be greater than in the constant F intensity scenario and the probability that SSB falls below the LRP will be greater by 2025 (30%). Additionally, the estimated fishing intensity will double relative to the current level ($F_{2012-2014}$) by 2025 as spawning biomass declines.

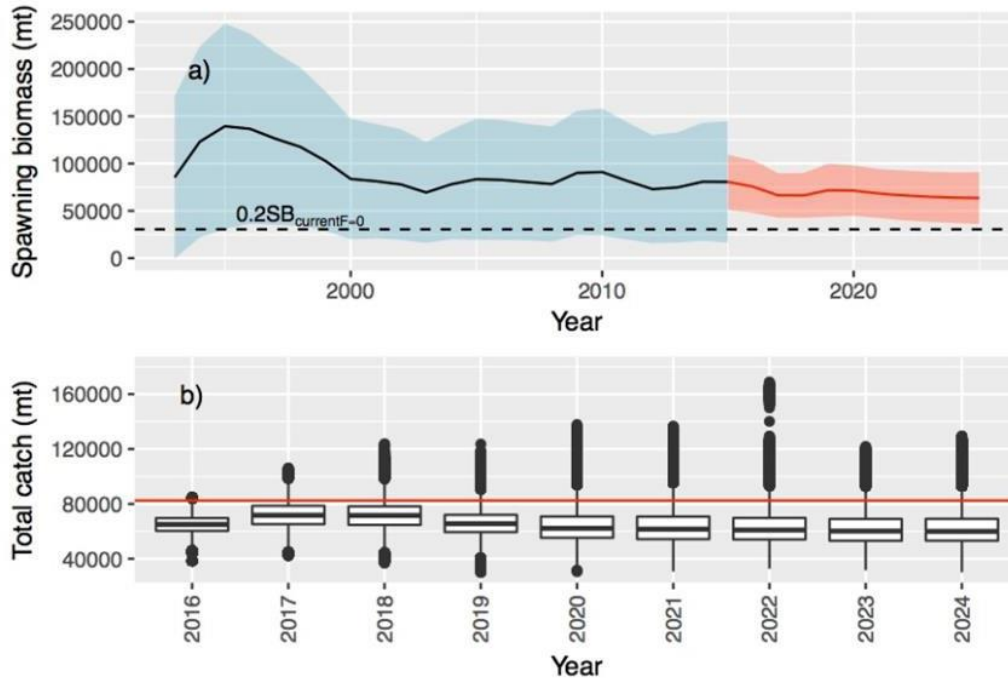


Figure NPALB-2. (A) Historical and future trajectory of North Pacific albacore (*Thunnus alalunga*) female spawning biomass (SSB) under a constant fishing intensity ($F_{2012-2014}$) harvest scenario. Future recruitment was based on the expected recruitment variability and autocorrelation. Black line and blue area indicates maximum likelihood estimates and 95% confidence intervals (CI), respectively, of historical female SSB, which includes parameter uncertainty. Red line and red area indicates mean value and 95% CI of projected female SSB, which only includes future recruitment variability and SSB uncertainty in the terminal year. (B) Expected annual catch under a constant fishing intensity ($F_{2012-2014}$) harvest scenario (2016-2025). The red line is the current average catch (2010-2014 = 82,432 mt).

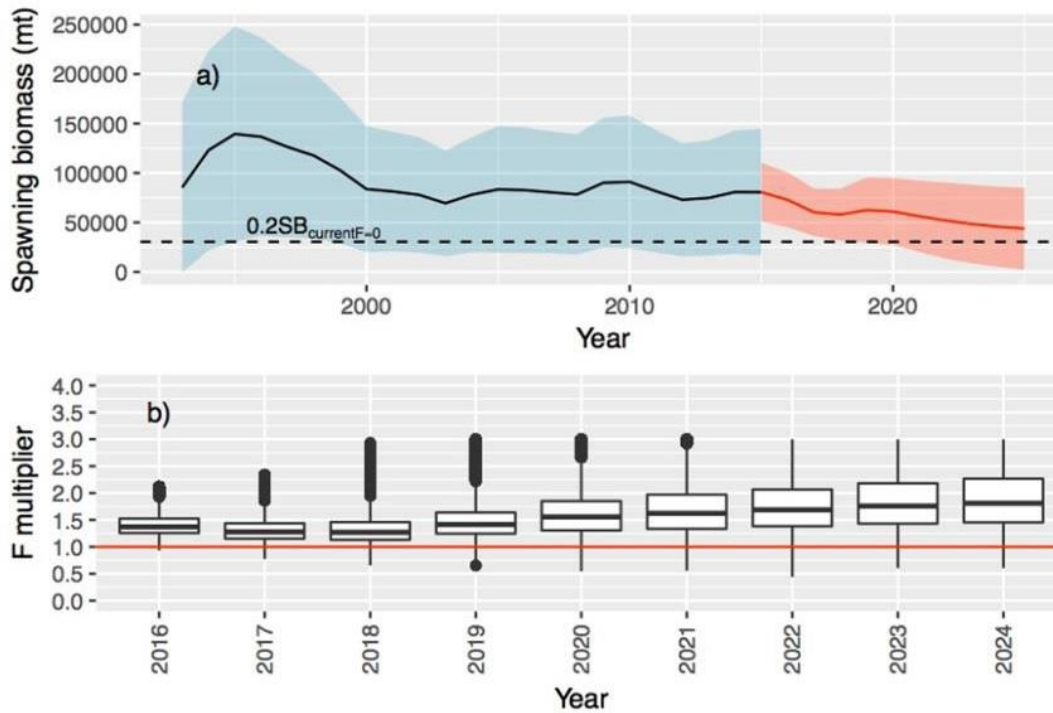


Figure NPALB-3. (A) Historical and future trajectory of North Pacific albacore (*Thunnus alalunga*) female spawning biomass (SSB) under a constant catch (average 2010-2014 = 82,432 mt) harvest scenario. Future recruitment was based on the expected recruitment variability and autocorrelation. Dashed line indicates the average limit reference point threshold for 2012-2014. Black line and blue area indicates maximum likelihood estimates and 95% confidence intervals (CI), respectively, of historical female SSB, which includes parameter uncertainty. Red line and red area indicates mean value and 95% CI of projected female SSB, which only includes future recruitment variability and SSB uncertainty in the terminal year. (B) Projected fishing intensity relative to the current fishing intensity (2012-2014) (red line) under a constant catch scenario (average 2010-2014).

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, USA
3 – 6 September 2019

Updated information on North Pacific albacore fishing effort
(Reference: Attachment C/Annex A in NC7 Summary Report)

WCPFC-NC15-2019/WP-01 (Rev.01)

Table 1. Average annual catch of North Pacific albacore (metric tonnes)

CCM	Data pertain to WCPFC Area only or entire N Pacific?	Fisheries with ANY catch of NP albacore	"Fishing for" NP albacore? (Y/N)	2006-2010 average annual catch
Canada	N Pacific total catches	Albacore troll	Y	5,911
	Total catches for Canada:			5,911
	Catches in fisheries "fishing for" NP albacore:			5,911
	% of total catch in fisheries "fishing for" NP albacore:			100
China	N. Pacific	Longline	Y	1,967
	N. Pacific	Longline	N	98
	Total catches for China:			1,967
	Catches in fisheries "fishing for" NP albacore:			1,869
	% of total catch in fisheries "fishing for" NP albacore:			95
Note: Historically, there are 10 longliners seasonally operating in the high seas of Northern Pacific Ocean targeting albacore, which covered the Convention Areas of WCPFC and IATTC				
Cook Islands	N Pacific total catches	Albacore troll	Y	31
	N Pacific total catches	Longline	Y	8
	Total catches for Cook Islands:			39
	Catches in fisheries "fishing for" NP albacore:			39
	% of total catch in fisheries "fishing for" NP albacore:			100
Fiji				1.188mt
	Total catches for Fiji Islands:			1.188mt
	Catches in fisheries "fishing for" NP albacore:			None
	% of total catch in fisheries "fishing for" NP albacore:			None
Japan	CA only	LL Coast	Y	16,817
		LL DW	Y	4,230
		PL Coast	N	89
		PL DW	Y	24,504
		PS Coast	N	14
		PS DW	N	1,841

		GN	N	430
		Troll	N	505
		Set Net	N	52
		Others	N	36
Total catches for Japan:				48,518
Catches in fisheries "fishing for" NP albacore:				45,551
% of total catch in fisheries "fishing for" NP albacore:				94
Korea				
	CA only	LL DW	Y	18
	CA only	LL DW	N	157
Total catches for Korea:				175
Catches in fisheries "fishing for" NP albacore:				18
% of total catch in fisheries "fishing for" NP albacore:				10
<u>NOTE:</u> Three LL DW participated in fishing for NP Albacore in 2007 and 2008, and the catch was 87 tons.				
Philippines				
	N Pacific	others	N	75
Total catches for Philippines (average for 2009-2011):				75
Catches in fisheries "fishing for" NP albacore:				0
% of total catch in fisheries "fishing for" NP albacore:				0
<u>NOTE:</u> Catches are mainly from artisanal Hook-and-Line Gear (non-targeting ALB)				
Chinese Taipei				
	N Pacific	albacore LL	Y	2,548
	N Pacific	LL others	N	552
Total catches for Chinese Taipei:				3,100
Catches in fisheries "fishing for" NP albacore:				2,548
% of total catch in fisheries "fishing for" NP albacore:				82
United States				
	N Pacific	Albacore troll	Y	12,344
		Longline	N	288
		Gillnet	N	3
		Pole and line	N	0
		Purse seine	N	23
		Other	N	577
Total catches for United States:				13,236
Catches in fisheries "fishing for" NP albacore:				12,344
% of total catch in fisheries "fishing for" NP albacore:				93
<u>NOTE:</u>				
1) These USA (2006-2010) data may not be confirmed from figures available to the Secretariat.				
2) US response: See all our annual reports under CMM 2005-03, the latest of which is dated 30 April 2012.				
Vanuatu				
	CA only	LL	Y	2,660
Total catches for Vanuatu:				2,660
Catches in fisheries "fishing for" NP albacore:				2,660
% of total catch in fisheries "fishing for" NP albacore:				100
CA				
Note: Report is derived from Dorado report for CMM 05-03 of Catch of North Albacore North of the Equator				
Belize	CA only	LL	Y	95

Total catches for Belize:				95
Catches in fisheries "fishing for" NP albacore:				95
% of total catch in fisheries "fishing for" NP albacore:				100
NOTE: catch unsegregated by area				
Federated States of Micronesia	CA only	LL	N	18
Total catches for FSM:				18
Catches in fisheries "fishing for" NP albacore:				0
% of total catch in fisheries "fishing for" NP albacore:				0
NOTE: Commenced fishery in 2009				
Marshall Islands	CA only	LL	N	N/A
Total catches for RMI:				
Catches in fisheries "fishing for" NP albacore:				
% of total catch in fisheries "fishing for" NP albacore:				
NOTE: Commenced fishery in 2008				
Vietnam	EEZ only	LL	N	13
Total catches for Vietnam (average of 2000-2011):				13
Catches in fisheries "fishing for" NP albacore:				0
% of total catch in fisheries "fishing for" NP albacore:				0
Note: Catches are mainly from LL only; and there is also possibility of wrongly identify by enumerators to account yellowfin and bigeye as albacore				

Table 1-1. Average annual catch of NP albacore during 2006-2010 (from Table 1)

Country	Target category	CA only	N Pacific
Canada	Target		5,911
	Non-Target		0
China	Target		1,869
	Non-Target		98
Cook Islands	Target		39
	Non-Target		0
Fiji	Target		0
	Non-Target		1,188
Japan	Target	45,551	
	Non-Target	2,967	
Korea	Target	18	
	Non-Target	157	
Philippines	Target		0
	Non-Target		75
Chinese Taipei	Target		2,548
	Non-Target		552
United States of America	Target		12,344
	Non-Target		892
Vanuatu	Target	2,660	3,109
	Non-Target	0	0
Belize	Target	95	
	Non-Target	0	
FSM	Target	0	
	Non-Target	18	

Marshall Islands	Target		
	Non-Target		
Vietnam	Target		0
	Non-Target		13
Total Catch			
		CA only	N Pacific
Total catch	Target	47,458	22,699
	Non-T	3,142	1,630
	Total catch	50,600	24,329
Proportion	Target	94%	93%
	Non-T	6%	7%
		100%	100%

Table 2. Fishing effort fishing for North Pacific albacore

CCM	Area ³	Fishery ⁴	2002-04 Average		2005		2006		2007		2008		2009		2010	
			No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days
Canada ⁵	N Pacific	ALB troll	215	8,898	213	8,564	174	6,243	207	6,902	137	5,773	138	6,540	161	7,294
	CA ⁶ only	ALB troll	8	256	1	56	0	0	0	0	0	0	0	0	0	0
China	N Pacific	LL	10	1,250	10	1,230	10	1,150	2	260	2	250	2	280	2	240
Cook Islands	N Pacific	ALB troll	4	183	2	240	2	171	1	57	1	0	0	0	0	0
	N Pacific	LL	1	2	1	4	0	0	1	37	1	17	0	0	0	0
Fiji	N Pacific	LL	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Japan ⁷	CA only	LL Coast	296	40,988	289	41,197	287	43,366	273	43,480	276	40,030	280	43,536	286	45,877
		LL DW	633	26,851	591	21,548	538	21,186	494	21,712	480	17,823	361	12,060	342	13,084
		PL DW	141	19,839	134	20,442	125	16,059	106	16,931	104	15,667	104	15,248	101	15,541
Korea ⁸	CA only	LL DW	13	1,072					3	268	3	107				
Philippines ⁹	N Pacific	Handline														
Chinese Taipei ¹⁰	N Pacific	ALB LL	25		23	2,363	24	4,156	21	3,360	18	2,603	13	2,082	20	2,093
USA	N Pacific	ALB troll		13,311		11,552		10,892		11,552		11,138		13,339		13,076
	CA only	ALB troll		789		371		66		42		*		*		*
Vanuatu	N Pacific	LL	26	1,348	37	4,394	55	3,196	36	2,683	41	2,385	30	1,530	28	1,515
Belize ¹¹													40		49	

* Data in the WCPO were confidential

³ Data pertain to WCPFC Area only or entire N Pacific?

⁴ Fisheries "fishing for" NP albacore

⁵ NOTE: For Canada no fishing inside the CA since 2005

⁶ Convention Area

⁷ Japanese albacore data indicates the fisheries in north of the equator within CA.

⁸ Korea's fishing effort "fishing for" NP albacore occurred in 2007 and 2008, and non-target fishing effort occurred every year in the North Pacific.

⁹ Estimates under study

¹⁰ This data just indicates the fishery fishing for NP albacore only

¹¹ Vessel number and effort was given for all species

Table 2 (continued). Fishing effort fishing for North Pacific albacore

CCM	Area	Fishery	2002-04 Average		2011		2012		2013		2014		2015		2016	
			No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days
Canada	N Pacific	ALB troll	215	8,898	161	8,556	172	5,974	183	6,465	160	4,747	164	5,197	152	5,359
	CA only	ALB troll	8	256	1	3	2	2	1	4	0	0	0	0	0	0
China	N Pacific	LL	10	1,250	10	1240	10	1280	10	1220	10	1290	10	900	10	910
Cook Islands	N Pacific	ALB troll	4	183												
	N Pacific	LL	1	2									2	22	1	68
Fiji	N Pacific	LL	0	0	0	0	9	230	29	920	20	663	10	88	8	170
Japan	CA only	LL Coast	296	40,988	273	42,996	266	38,977	248	37,529	246	35,362	237	37,801	229	37,308
		LL DW	633	26,851	341	12,683	320	13,818	321	13,406	305	13,305	285	11,763	256	10,419
		PL DW	141	19,839	98	13,433	95	14,646	85	12,781	84	12,147	84	12,743	81	13,923
Korea	CA only	LL DW	13	1,072	59	7,407		11,061		1,746		1,224		857		934
Philippines	CA only	Artisanal fishery (non-targeting)														
Chinese Taipei	N Pacific	ALB LL	25		21	1,839	21	1,423	22	2,108	22	2,348	23	2,401	24	2,259
USA	N Pacific	ALB troll		13,311		13,983		15,218		13,509		12,199		11,506		12,743
	CA only	ALB troll		789		155		*		*		7		8		0
Vanuatu	N Pacific	LL	26	1,348	42	2,338	46	1,189	60	3,337	87	3,695	88	3,702	38	2,381
Belize																

Italic = preliminary data

* Data in the WCPO were confidential

CCM	Area	Fishery	2002-04 Average		2017		2018		2019		2020		2021		2022	
			No. of vessel s	Vessel days	No. of vessel s	Vessel days	No. of vessel s	Vessel days	No. of vessel s	Vesse l days	No. of vessel s	Vesse l days	No. of vessel s	Vesse l days	No. of vessel s	Vesse l days
Canada	N Pacific	ALB troll	215	8,898	121	4,978	121	4,196								
	CA only	ALB troll	8	256	5	100	0	0								
China	N Pacific	LL	10	1,250	10	850	10	838								
Cook Islands	N Pacific	ALB troll	4	183	0	0	0	0								
	N Pacific	LL	1	2	0	0	0	0								
Fiji	N Pacific	LL	0	0	7	147	6	180								
Japan	CA only	LL Coast	296	40,988	233	35,647	229	34,011								
		LL DW	633	26,851	253	10,171	248	10,478								
		PL DW	141	19,839	82	12,656	80	12,061								
Korea	CA only	LL DW	13	1,072		1,990		1,345								
Philippines																
Chinese Taipei	N Pacific	ALB LL	25		25	2,567	25	2,943								
USA	N Pacific	ALB troll		13,311		12,673		10,916								
	CA only	ALB troll		789		567		127								
Vanuatu	N Pacific	LL	26	1,348	56	3,933	54	3,967								
Belize																

Table 2-1. As requested by the NC12 (Paragraph 57) related to Paragraph 2 in CMM 2005-03, CCMs are requested to report on how to control their fishing effort fishing for North Pacific albacore by indicating, for example, limiting vessels, fishing days, licenses, or some other measures.

CCM	Area	Fishe ry	Regulation of fishing effort
Canada	N Pacific	ALB troll	<p>Canada issues domestic “CT” fishing licences for Albacore Tuna. The CT licence is intended to act as a management measure to strengthen management of the domestic tuna fishery, and help ensure Canada is meeting international obligations related to effort. As of 2013, commercial licence holders wanting to harvest tuna are required to hold a primary licence (with Schedule II privileges) and apply for/receive a separate CT (Tuna) licence. The CT licence authorizes fishing of Pacific Albacore tuna in Canada’s Exclusive Economic Zone (EEZ) and on the high seas under separate licence conditions. The CT licence is vessel-based and must be renewed annually.</p> <p>Canadian licence holders without a primary licence are able to access tuna in international high seas waters through “Section 68 High Seas” licenses. The Section 68 licence is intended to act as a management measure to strengthen management of the tuna fishery in the high seas, and help ensure Canada is meeting international obligations related to effort. The Section 68 licence must be renewed annually.</p>
	CA only	ALB troll	<p>Canada issues domestic “CT” fishing licences for Albacore Tuna. The CT licence is intended to act as a management measure to strengthen management of the domestic tuna fishery, and help ensure Canada is meeting international obligations related to effort. As of 2013, commercial licence holders wanting to harvest tuna are required to hold a primary licence (with Schedule II privileges) and apply for/receive a separate CT (Tuna) licence. The CT licence authorizes fishing of Pacific Albacore tuna in Canada’s Exclusive Economic Zone (EEZ) and on the high seas under separate licence conditions. The CT licence is vessel-based and must be renewed annually.</p> <p>Canadian licence holders without a primary licence are able to access tuna in international high seas waters through “Section 68 High Seas” licenses. The Section 68 licence is intended to act as a management measure to strengthen management of the tuna fishery in the high seas, and help ensure Canada is meeting international obligations related to effort. The Section 68 licence must be renewed annually.</p>
China	N Pacific	LL	
Cook Islands	N Pacific	ALB troll	Not Applicable, CK has no troll vessels in the fishery
	N Pacific	LL	Limited by license.
Fiji	N Pacific	LL	Vessel Size class & capacity, Licenses and other measures specified in Offshore Fisheries Management Act 2012 & Offshore Fisheries Management Regulation 2014 and National Strategy for Fiji Fishing Vessels Operating in Areas Beyond National Jurisdiction.
Japan	CA only	LL Coast	The number of fishing vessels is limited by the license system.
		LL DW	The number of fishing vessels is limited by the license system.

		PL DW	The number of fishing vessels is limited by the license system.
Korea	CA only	LL DW	There has been no Korean flagged fishing vessel targeting for N.ALB. However, all authorized fishing vessels operating in the CA are required to report their catches including non-targeting species daily via the e-reporting system.
Philippines	-	-	Not applicable
Chinese Taipei	N Pacific	ALB LL	1. We have limited the number of our fishing vessels fishing for North Pacific albacore to stay below 25 since CMM 2005-03 was implemented. The vessel number is controlled when we issue the fishing permit every year. 2. For other fishing vessels that are not allowed to fishing for North Pacific albacore, their bycatches of this albacore would be monitored to stay below certain ratio
USA	N Pacific	ALB troll	The United States has a single fleet that fishes for North Pacific albacore in the Convention Area: the albacore troll fleet is based out of the U.S. West Coast. The albacore troll fleet is not currently subject to effort or catch controls, but permitting, VMS, and reporting (through vessel logbooks) requirements enable the United States to monitor the fishery, including levels of participation, fishing effort and catches. The United States will continue to monitor fishing effort and implement any controls needed to comply with paragraph 2 of the CMM, as well as with relevant decisions adopted in other RFMOs (IATTC).
	CA only	ALB troll	The United States has a single fleet that fishes for North Pacific albacore in the Convention Area: the albacore troll fleet is based out of the U.S. West Coast. The albacore troll fleet is not currently subject to effort or catch controls, but permitting, VMS, and reporting (through vessel logbooks) requirements enable the United States to monitor the fishery, including levels of participation, fishing effort and catches. The United States will continue to monitor fishing effort and implement any controls needed to comply with paragraph 2 of the CMM, as well as with relevant decisions adopted in other RFMOs (IATTC).
Vanuatu	N Pacific		Vanuatu currently reviewing its Fisheries Regulation to limit the control of fishing effort fishing for North Pacific albacore
Belize			
FSM			
Kiribati			
Mexico			
Vietnam			

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, USA
3 – 6 September 2019

**CONSERVATION AND MANAGEMENT MEASURE FOR
NORTH PACIFIC ALBACORE**

Explanatory note

1. This proposal is to remove one reporting requirement in CMM 2005-03: the requirement in paragraph 3 to report catches of North Pacific albacore every six months. This twice-annual reporting provides no additional value with the annual reporting described in paragraph 4, and is effectively redundant.
2. The IATTC made a parallel change to its Resolution on North Pacific albacore (C-05-02) in 2018 with Resolution C-18-03, which eliminated a similar reporting requirement for IATTC CPCs. Thus, the proposed change would better align the conservation and management measures of the two Commissions, which is in keeping with paragraph 8 of the existing CMM.

CMM 2013-06 Criteria

In accordance with CMM 2013-06 Conservation and Management Measure on the criteria for the consideration of Conservation and Management proposals the following assessment has been undertaken.

a. Who is required to implement the proposal?

Only fisheries authorities of CCMs that catch North Pacific albacore are required to implement the proposed change to the CMM.

b. Which CCMs would this proposal impact and in what way(s) and what proportion?

Only CCMs that catch North Pacific albacore are required to implement the proposed change to the CMM. The proposed change somewhat reduces the reporting requirements for

these CCMs.

- c. Are there linkages with other proposals or instruments in other regional fisheries management organizations or international organizations that reduce the burden of implementation?*

The proposed change brings the CMM into better alignment with the IATTC's Resolutions on North Pacific albacore.

- d. Does the proposal affect development opportunities for SIDS?*

No. The proposed change reduces reporting requirements.

- e. Does the proposal affect SIDS domestic access to resources and development aspirations?*

No.

- f. What resources, including financial and human capacity, are needed by SIDS to implement the proposal?*

None.

- g. What mitigation measures are included in the proposal?*

None are required.

- h. What assistance mechanisms and associated timeframe, including training and financial support, are included in the proposal to avoid a disproportionate burden on SIDS?*

None are required.

**CONSERVATION AND MANAGEMENT MEASURE FOR
NORTH PACIFIC ALBACORE**

Conservation and Management Measure 2019-XX

The Western and Central Pacific Fisheries Commission (WCPFC),

Observing that the best scientific evidence on North Pacific albacore from the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean indicates that the species is likely not overfished relative to the limit reference point adopted by the Commission (20%SSB current F=0) and overfishing is likely not occurring.

Recalling further Article 22(4) of the WCPFC Convention that provides for cooperation with the IATTC regarding fish stocks that occur in the Convention Areas of both organizations and

Recognizing that the Inter-American Tropical Tuna Commission (IATTC) adopted, at its 73rd meeting, conservation and management measures on North Pacific albacore, [and that it adopted supplemental measures at its 85th meeting that were amended at its 93rd meeting;](#)

Adopts, in accordance with the Article 10 of the WCPFC Convention that:

1. The total level of fishing effort for North Pacific albacore in the Convention Area north of the equator shall not be increased beyond current levels.
2. The Members, Cooperating Non-Members and participating Territories (hereinafter referred to as CCMs) shall take necessary measures to ensure that the level of fishing effort¹² by their vessels fishing for North Pacific albacore in the WCPF Convention Area is not increased beyond 2002-2004 annual average levels;

~~All CCMs shall report all catches of North Pacific albacore to the WCPFC every six months, except for small coastal fisheries which shall be reported on an annual basis. Such data shall be reported to the Commission as soon as possible and no later than one year after the end of the period covered.~~

4.3. All CCMs shall report annually to the WCPFC Commission all catches of albacore north of the equator and all fishing effort north of the equator in fisheries directed at albacore. The reports for both catch and fishing effort shall be made by gear type. Catches shall be reported in terms of weight. Fishing effort shall be reported in terms of the most relevant measures for a given

¹² Paragraph 55 of the NC5 Summary Report says that: “NC members concurred in their understanding that as long as the substantive requirements of IATTC’s resolution on North Pacific albacore and the WCPFC’s CMM on North Pacific albacore are the same, CCMs may chose to implement the requirements of paragraph 2, and their obligations under the IATTC resolution on North Pacific albacore without regard to the boundary between the respective areas of competence of the WCPFC and the IATTC.”

gear type, including at a minimum for all gear types, the number of vessel-days fished, using the template provided in Annex 1.

~~5.4.~~ The Northern Committee shall, in coordination with International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean and other scientific bodies conducting scientific reviews of this stock, including the WCPFC Scientific Committee, monitor the status of North Pacific albacore and report to the Commission on the status of the stock at each annual meeting, and make such recommendations to the Commission as may be necessary for their effective conservation.

~~5. The Commission shall consider future actions with respect to North Pacific albacore based on recommendations of the Northern Committee.~~

~~6.5.~~ The CCMs shall work to maintain, and as necessary reduce, the level of fishing effort on North Pacific albacore within the Convention Area commensurate with the long-term sustainability of the stock.

~~7.6.~~ The WCPFC Executive Director shall communicate this resolution to the IATTC and request that the two Commissions engage in consultations with a view to reaching agreement on a consistent set of conservation and management measures for North Pacific albacore, and specifically, to propose that both Commissions adopt as soon as practicable uniform conservation and management measures and any reporting or other measures needed to ensure compliance with agreed measures.

~~8.7.~~ The provisions of paragraph 2 shall not prejudice the legitimate rights and obligations under international law of those small island developing State Members and participating territories in the Convention Area whose current fishing activity for North Pacific albacore is limited, but that have a real interest in, and history of, fishing for the species, that may wish to develop their own fisheries for North Pacific albacore in the future.

~~9.8.~~ The provisions of paragraph ~~7~~9 shall not provide a basis for an increase in fishing effort by fishing vessels owned or operated by interests outside such small island developing State Members or participating territories, unless such fishing is conducted in support of efforts by such Members and territories to develop their own domestic fisheries.

9. This CMM shall replace the CMM 2005-03.

Annex I: Average annual fishing effort for 2002-2004 and annual fishing effort for subsequent years for fisheries directed at North Pacific albacore in the North Pacific Ocean

CCM	Area ¹³	Fishery	2002-04 Average		Year		Year		Year		Year		Year		Year	
			No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days

¹³ If collective effort limits across the North Pacific Ocean, report Convention Area and North Pacific Ocean separately

